

October 26, 2023

Sent via email to ken@tmc-belgrade.com

TMC, Inc.
P.O. Box 69
Belgrade, MT 59714

RE: Deficiency Notice
Application for a Standard Opencut Mining Permit Application
Black Site, Opencut #3462
Gallatin County

To Whom It May Concern:

On October 12, 2023 the Department of Environmental Quality (DEQ) received your response to its August 9, 2023 Deficiency Notice on the Opencut Mining Permit application for the above referenced site.

DEQ performed an acceptability review of the application in accordance with the requirements of §§ 82-4-432 and 434 Montana Code Annotated (MCA) and of the Opencut Mining Act and its implementing rules, Administrative Rules of Montana (ARM) Title 17, Chapter 24, Subchapter 2). In accordance with § 82-4-432(10) MCA, this letter serves as notice to you that the application contains deficiencies which must be corrected before the application can be determined to be acceptable. A detailed identification of all deficiencies is provided below.

Pursuant to the provisions of § 82-4-432 of the Opencut Mining Act, you have the following options for addressing the deficiencies identified by DEQ in the application:

1. Submit revised application materials that resolve all deficiencies, and after DEQ's review confirms the application is acceptable, the permit will be issued;
2. Submit revised application materials that do not resolve all deficiencies, and after DEQ's review determines the application is not yet acceptable, it will be disapproved and a Deficiency Notice will be issued; or,
3. Do not submit revised application materials, and one year after the date of DEQ's latest Deficiency Notice, DEQ may notify you that the application will be abandoned and void unless you provide the requested information within 30 days of DEQ's notification.

Should you disagree with DEQ's decision to disapprove your application based on the identified deficiencies, you are entitled pursuant to § 82-4-427(1)(a) MCA, to appeal DEQ's decision to the Board of Environmental Review by submitting a written request to the board within 30 days of the date of this Deficiency Notice.

Upon receipt of any required materials, DEQ will review your revised application and determine whether it is acceptable or if deficiencies remain.

On July 25, 2023, DEQ conducted a public meeting for the above referenced permit application pursuant to the Opencut Mining Act, § 82-4-432, MCA.

Submit revised application materials that resolve all the deficiencies identified below to the DEQ Opencut Mining Section in Helena as one package. Submit complete versions of any forms you revise, do not resubmit the whole application package. For example, if you make changes to the *Standard Opencut Mining Permit Application* resubmit that entire form, do not resubmit unchanged documents attached to it. The contents of an application constitute legal documents and become part of the permit; therefore, all required certifications and approvals must be signed and dated.

Opencut Section forms are available at: <http://deq.mt.gov/mining/programs/opencut>.

Note: The *italicized* deficiencies below are repeated from the Deficiency Notice dated August 9, 2023, because they were not addressed in the most recent submittal. The repeated deficiencies may contain clarification and/or additional information below them. Any deficiency items with a strike-through have been addressed. Correct the items that have not been crossed out.

Standard Opencut Mining Permit Application

1. **B5-2:** Check the “Wetlands” box as the Ecological Mapping, Monitoring and Analysis (EMMA) Group of the University of Montana has mapped wetlands within 1,000 feet of the permit area.

Check the “Stream/Creek” box as the unnamed perennial stream is within 1,000 feet of the permit area.

2. **B7-1:** Public comments have indicated that Black Bear, Moose, Osprey, and Sandhill Crane have been observed in and within 1,000 feet of the permit area. Check the “Black Bear” and “Moose” boxes and include Osprey and Sandhill Crane in the “Other” box.
3. **C1:** Refer to the deficiency for the *Determining Depth to Groundwater Worksheet* below and provide any updates to this section as appropriate to ensure consistency.
4. **C1-4:** In this section the Operator has indicated that they will maintain a 10-foot buffer distance between mine floor elevation and high groundwater. Add additional information to this section that states if groundwater is encountered onsite, Opencut activities will cease, and the Operator will backfill a minimum of 10 feet to maintain the buffer.
5. ~~**D2-2:** It appears likely that easements are present within or adjacent to the proposed opencut boundary. Check the “Yes” box and include the width of the easements associated with the “Water Conveyance Facility” (Irrigation ditch), “Above Ground Utilities” (Powerlines), and “Other” (Irrigation mainline). Provide documentation from the easement holders stating:
 - a. setback requirements;
 - b. the maximum slope the companies allows in their easement; and
 - c. any other requirements for activities conducted under, over, or adjacent to the infrastructures (e.g. inspections, safety, excavation, stockpiling, etc.)~~

Update: Do to changes/updates in the application it is now clear that there are no easements within the proposed permit boundary. Therefore, Check “No.”

6. **D3-5c:** Section D3-5 identified that there would be a highwall on-site and the Reclamation Bond Spreadsheet indicated that the highwall scenario would be Cut & Fill. However, the Cut & Fill box was not checked. Therefore, check the box for the highwall scenario that best depicts how the site will be mined and ensure that both this section and the Reclamation Bond Spreadsheet are consistent [ARM 17.24.220].

Update: The maximum length of highwall and the maximum height of highwall have been updated to reflect the newly proposed conditions. However, neither box in D3-5c was checked. Check the box in this section that is consistent with the reclamation bond spreadsheet and application.

7. ***Section G 8:*** *TMC, Inc. understands that obtaining an Opencut Mining Permit does not relieve TMC, Inc.'s obligation to comply with any other applicable federal, state, county, or local regulations, or ordinances and permits, licenses, and approvals for the operation. Obtaining an Opencut Mining Permit does not mean that an Operator can legally mine the site without first obtaining permits from other agencies. DEQ recommends contacting DEQ Water Protection Bureau, at 406-444-5546, to determine if a water discharge permit is required and DEQ Air Quality Bureau, at 406-444-3490, to determine if an air quality permit is required for this opencut operation.*

Update: The Signature, legibly print or typed name, Title and Date fields were left blank with this most recent submittal. Submit a revised application ensuring these fields are populated.

Maps

Map(s) Note: If changes are made to the application that affects the map(s), submit a revised map(s). The map's date must be revised prior to resubmittal to reflect that the map has been changed. Map requirements can be found at ARM 17.24.221 (1-7) and in the Map Guideline at <http://deq.mt.gov/Mining/assistance>.

8. ***Site Map:*** *In accordance with ARM 17.24.221(3) all required map features are not shown on the site map or are inconsistent with the application documents. Site maps must be displayed on an aerial photo base. Submit a revised map that shows all required map features including, but not limited to the following:*
- ~~a. Correct the Township, Section, and Range;~~
 - b. Show the approximate location of the crusher;
 - c. existing and proposed monitoring well locations (If within the proposed permit boundary);
 - d. Public comments have identified inaccuracies in identified utilities, specifically above ground vs. buried power lines in the southwest corner of the permit boundary. Verify that the utilities shown are accurately labeled;
 - ~~e. historic disturbances within or adjacent to permit area boundary; and~~
 - f. any other pertinent features that are necessary to ensure compliance with the Act and rules.
9. ***Area Map:*** *In accordance with ARM 17.24.221(4), the area map must be displayed on an aerial photo base and must show and identify the following features within 1,000 feet outside of the permit boundary (including but not limited to):*
- a. Correct the Township, Section, and Range;
 - ~~b. roads leading to the site;~~
 - ~~e. above and below ground utilities and easements and their states set back;~~
 - ~~d. water wells. The Ground Water Information Center (GWIC) well locations do not match the well locations on the Area map. Endure that the locations of the wells are accurate and have been field verified; and~~
 - e. any other pertinent features that are necessary to ensure compliance with the Act and this subchapter.

Update: There are two wells labeled “99166” on the Area Map (Figure 1). Correct these labels to ensure that all wells have correct GWIC IDs.

Additionally, public comments have identified inaccuracies in identified utilities, specifically above ground vs. buried power lines in the southwest corner of the permit boundary. Verify that the utilities shown are accurately labeled;

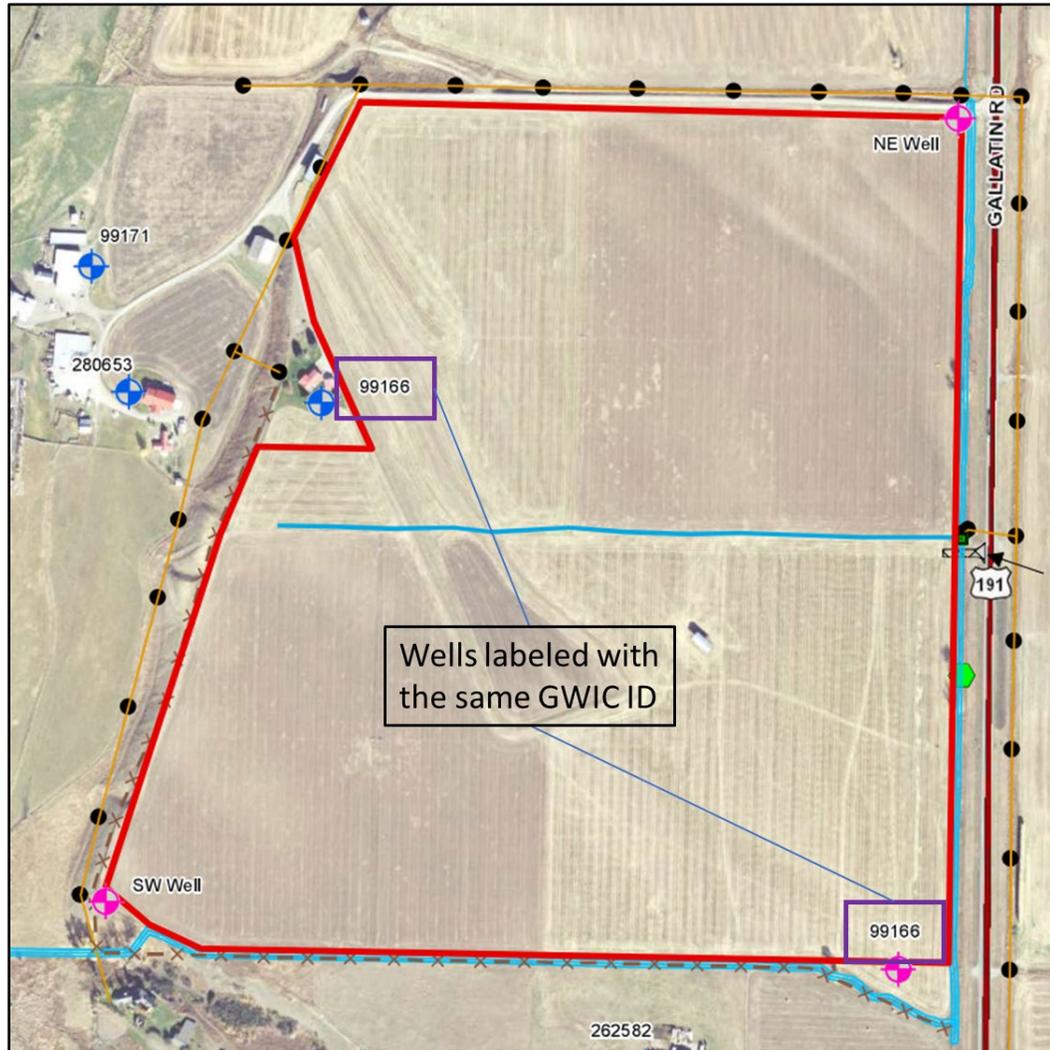


Figure. 1

10. **Reclamation Map:** In accordance with ARM 17.24.221(5), reclamation maps must be displayed on an aerial photo base and must show and identify all the following existing and proposed features:
 - a. Correct the Township, Section, and Range; and
 - b. any other pertinent features that are necessary to ensure compliance with the Act and this subchapter.

11. **Location Map:** In accordance with ARM 17.24.221(6), the location map may be on an aerial or topo base and must show the site’s location in relation to the nearest town, city, or major intersection and be sufficient to allow the public to locate the proposed site.

- a. *Correct the Township, Section, and Range; and*
- b. *any other pertinent features that are necessary to ensure compliance with the Act and this subchapter.*

Supplemental Documents

12. Determining Depth to Groundwater Worksheet: ~~The information provided to confirm groundwater levels is not adequate. Therefore, complete either a, b, or c of Section B-1 to ensure groundwater will not be intersected. Revise Section C1 in the Standard Opencut Application to ensure consistency with the worksheet answers and method(s).~~

~~Additionally, correct the Township, Section, and Range stated on the map.~~

Update: The DEQ cannot verify if the provided static water levels are accurate as the Operator has not monitored groundwater for a sufficient period of time to determine a peak and a sustained decline in the groundwater level. Normally monitoring should be done at least one month prior to irrigation ditches being turned on and one month after the ditches have been turned off. Observation measurements must be made weekly or more frequently during the appropriate periods. To obtain accurate high-water levels, observation measurements must be made at a minimum of once a week for a minimum of four weeks when groundwater is at its highest to accurately determine high groundwater level. More complex sites should include at least two weeks of observation measurements prior to and two weeks of observation measurements after the groundwater peak, with best results having groundwater observations made weekly throughout the season.

Additionally, the Montana Well Log Report obtained from the Ground Water Information Center (GWIC) indicates that the well in the southeast corner (GWIC#99166) was drilled to a depth of 105 feet, is unscreened and contains an open bottom. In accordance with the Determining Depth to Groundwater Worksheet, an observation well pipe must be perforated from 1 foot below the ground surface to 3 feet below the proposed maximum mining depth. GWIC#99166 is an open bottom, unscreened well and is designed to only collect water from a depth of 105 feet, and therefore, the well may not be representative of the aquifer/first water that affects groundwater at this site. Provide information proving this well is representative of the high and low water levels at this site or provide other supporting data that represents the high and low water level for this area of the site.

Provide well logs for each well identified in the Determining Depth to Groundwater Worksheet and ensure the well logs include information pertaining to their installation (i.e. screening, installed depth, etc.). Ensure that the date and depth drilled are included as well as the monitoring data for each time monitored. Submit the above and all other pertinent information with the revised Determining Depth to Groundwater Worksheet. Ensure the worksheet is completed with the worst-case scenario high water level as captured during monitoring of a season of water levels during the peak highwater.

The Opencut application indicates that “the mine floor will grade northwest across the property keeping a 10-foot minimum buffer distance between mine floor elevation and high groundwater.” Additionally, the Operator has indicated that the maximum depth of mining will be 59 feet. The Operator must provide a map of the permit boundary showing the maximum depth of mining across the site in relation to high ground water elevations as determined through accurate monitoring during the peak high for this site. Due to topography and a sloping water table gradient, the seasonal high water level is likely variable across the site. At present, the

Department does not have a definitive understanding of how the 10-foot minimum buffer distance will be maintained from high water level as mining progresses across the site. Therefore, describe in detail how the Operator will mine the site to ensure a minimum 10-foot buffer distance is kept from the high water level across the site.

Additionally, ensure that all information in the Determining Depth to Groundwater Worksheet correlates with section C1 of the permit application.

13. Reclamation Bond Spreadsheet: *Ensure the following items are consistent with changes made in the application and that the latest spreadsheet form is downloaded before submitting the revisions [ARM 17.24.220].*

- a. *Soil and overburden depths; and*
- b. *Any other pertinent items.*

Update: Correct soil and overburden depths to match those in section C2-3.

Bond

Bond Note: It may be in the Operator's best interest to wait to address the bonding deficiencies below and to obtain an updated bond until there are no remaining deficiencies for the Reclamation Bond Spreadsheet. If the acreage, dollar amount, or other bond parameters change, submit a revised Bond or an additional Bond. The Opencut Section requires the original paper Bond to be submitted before the Permit can be issued.

14. Irrevocable Letter of Credit #3605230160522: Submit a new bond addressing the following deficiencies:

- a. Bonded acreage does not match reclamation bond spreadsheet.
- b. Bond amount does not match reclamation bond spreadsheet.
- c. There is no corporate seal or stamp on the Bank Authorization/Certification letter.

The DEQ strongly recommends that you use the above-listed deficiencies as a checklist to confirm that your revised application materials are complete and acceptable prior to resubmittal.

Please call the number below if you have questions about these matters.

Sincerely,



Anne Spezia
Environmental Science Specialist
Opencut Mining Section
Department of Environmental Quality
P.O. Box 200901, Helena, MT 59620-0901
Phone: (406) 444-9786; Fax: (406) 444-4988
Email: Anne.Spezia@mt.gov

C: Pat Eller, Morrison-Maierle – neller@m-m.net
Interested Parties

August 9, 2023

Sent via email to ken@tmc-belgrade.com

TMC, Inc.
P.O. Box 69
Belgrade, MT 59714

RE: Deficiency Notice
Application for a Standard Opencut Mining Permit Application
Black Site, Opencut #3462
Gallatin County

To Whom It May Concern:

The Department of Environmental Quality (DEQ) deemed this application “complete” on May 26, 2023. For administrative purposes, this site has been assigned Opencut number 3462. Please include this Opencut number on all future correspondence about the site.

DEQ performed an acceptability review of the application in accordance with the requirements of §§ 82-4-432 and 434 Montana Code Annotated (MCA) and of the Opencut Mining Act and its implementing rules, Administrative Rules of Montana (ARM) Title 17, Chapter 24, Subchapter 2). In accordance with § 82-4-432(10) MCA, this letter serves as notice to you that the application contains deficiencies which must be corrected before the application can be determined to be acceptable. A detailed identification of all deficiencies is provided below.

Pursuant to the provisions of § 82-4-432 of the Opencut Mining Act, you have the following options for addressing the deficiencies identified by DEQ in the application:

1. Submit revised application materials that resolve all deficiencies, and after DEQ’s review confirms the application is acceptable, the permit will be issued;
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3. Do not submit revised application materials, and one year after the date of DEQ’s latest Deficiency Notice, DEQ may notify you that the application will be abandoned and void unless you provide the requested information within 30 days of DEQ’s notification.

Should you disagree with DEQ’s decision to disapprove your application based on the identified deficiencies, you are entitled pursuant to § 82-4-427(1)(a) MCA, to appeal DEQ’s decision to the Board of Environmental Review by submitting a written request to the board within 30 days of the date of this Deficiency Notice.

Upon receipt of any required materials, DEQ will review your revised application and determine whether it is acceptable or if deficiencies remain.

On July 25, 2023, DEQ conducted a public meeting for the above referenced permit application pursuant to the Opencut Mining Act, § 82-4-432, MCA.

Submit revised application materials that resolve all the deficiencies identified below to the DEQ Opencut Mining Section in Helena as one package. Submit complete versions of any forms you revise, do not resubmit the whole application package. For example, if you make changes to the *Standard Opencut Mining Permit Application* resubmit that entire form, do not resubmit unchanged documents attached to it. The contents of an application constitute legal documents and become part of the permit; therefore, all required certifications and approvals must be signed and dated.

Opencut Section forms are available at: <http://deq.mt.gov/mining/programs/opencut>.

Standard Opencut Mining Permit Application

- B4-1:** Check the “Overline Power Lines or Facilities” and “Underground Utilities” boxes to account for the structures, facilities, and/or surface disturbances located within the permit area [ARM 17.24.218(1)]. The northwest corner of the proposed permit boundary indicates a Power Line will cross inside of the permit boundary. See Figure 1 below. The Irrigation Main Line that runs through the center of the permit boundary was not accounted for as Underground Utilities. See Figure 2 below.

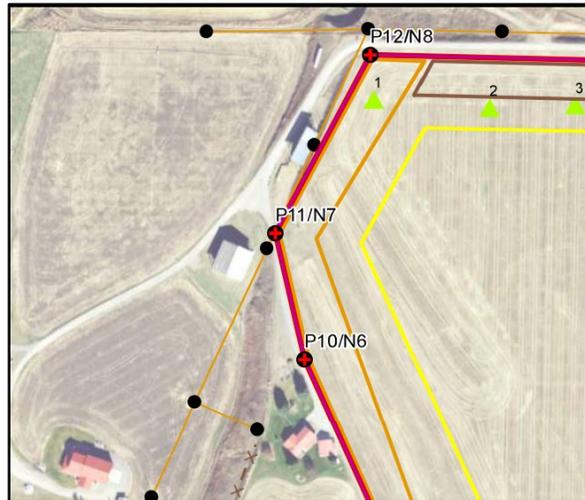


Figure 1.



Figure 2.

2. **C1:** Refer to the deficiency for the *Determining Depth to Groundwater Worksheet* below and provide any updates to this section as appropriate to ensure consistency.
3. **C2-1:** The soil information provided in this table is not consistent with the soil photos provided. The Department has reviewed the soil photos provided and determined the soil depths to be as follows:

Soil Test Hole I.D. on Map	Soil Thickness (inches)	Overburden Thickness (inches)
T1	24	56
T2	22	46
T3	17	24
T4	17	52
T5	18	54
T6	20	44
T7	20	30
T8	16	36
T9	18	60
T10	16	24
T11	18	38
T12	16	36
T13	24	62
T14	24	12
T15	20	32
T16	18	20

T17	12	36
T18	20	12
T19	16	28
T20	17	26

Refer to the definition of soil in the Opencut Act and the Opencut Section’s Soil Guideline for more information on how to identify soil [§§ 82-4-403(15), MCA, 82-434(2)(b), MCA, ARM 17.24.218(1)(c & d) & ARM 17.24.220(2)(b)]. Therefore, either revise this section to be consistent with the above table **or** provide further documentation representing the site that supports the proposed soil depths in accordance with the Opencut Act and implementing rules (Refer to C2-3 below).

- C2-3:** The soil information provided in this section is not consistent with the soil photos provided with the application. Revise this section to indicate that 18 inches of soil and 21 inches of overburden would be saved for reclamation.

Alternatively, the operator may provide additional test hole data and soil analysis to support salvage and replacement depths that may be more representative of the entire permit area. The *Reclamation Bond Spreadsheet* must also be revised to be consistent with this section [§ 82-4-434(2)(b), MCA, ARM 17.24.218(1)(c & d) & ARM 17.24.220(2)(b)].

- C3-1:** In section B2-1 the Operator indicated that there is a “small swale feature that runs through the middle of the property.” There is an existing historical disturbance onsite. Therefore, check “Yes” box and complete this section. Ensure this section is completely filled out as these items pertain to how the existing disturbance would be reclaimed and where the material to do so would come from [ARM 17.24.218(1)(e)]. Check C3-1a as the excavated borrow material remained onsite.
- C3-2:** Check the ‘Yes’ box as information supplied in section B2-1 indicates that historical landowner disturbance has occurred within the proposed permit boundary [ARM 17.24.218(1)(e)].
- D2-2:** It appears likely that easements are present within or adjacent to the proposed opencut boundary. Check the “Yes” box and include the width of the easements associated with the “Water Conveyance Facility” (Irrigation ditch), “Above Ground Utilities” (Powerlines), and “Other” (Irrigation mainline). Provide documentation from the easement holders stating:
 - setback requirements;
 - the maximum slope the companies allows in their easement; and
 - any other requirements for activities conducted under, over, or adjacent to the infrastructures (e.g. inspections, safety, excavation, stockpiling, etc.)

Revise this section, provide applicable further explanations, attach documentation, and ensure that all easements and/or required setbacks are shown on the site map and/or area map [ARM 17.24.218(1)(j)].

- D2-2a:** Documentation was provided for the required setback from the ditches East and West of the permit. It appears that the setback lies within the permit boundary, therefore check “Water Conveyance Facility” (Ditch) and include the 10-foot setback.

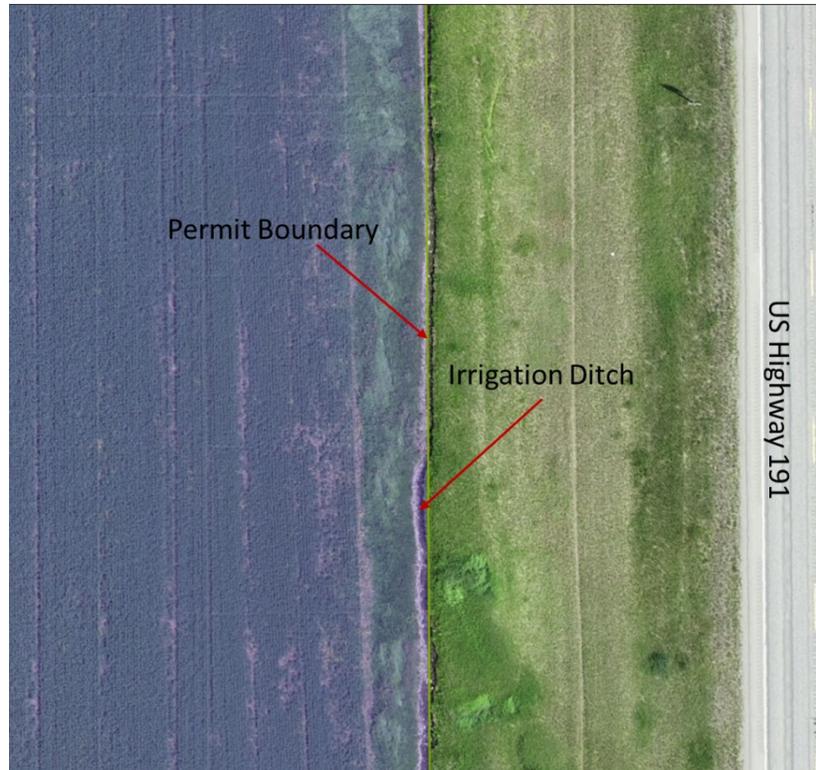


Figure 3.

9. **D3-5c:** Section D3-5 identified that there would be a highwall on-site and the *Reclamation Bond Spreadsheet* indicated that the highwall scenario would be Cut & Fill. However, the Cut & Fill box was not checked. Therefore, check the box for the highwall scenario that best depicts how the site will be mined and ensure that both this section and the *Reclamation Bond Spreadsheet* are consistent [ARM 17.24.220].
10. **E2-2:** The “None” box was checked indicating that the well, scale, and scale house will be removed after reclamation of the site is completed. Ensure that if any of these structures or facilities will remain, the appropriate boxes are checked.
11. **E4-4aii:** The water collection areas described in this section and shown on the *Reclamation Map* appear to be greater than ½ acre in size. Check the “Water collection area is > ½ and ≤ 1 acre in size” box and explain why the water collection area needs to be greater than ½ acre in size [ARM 17.24.219(1)(c) & ARM 17.24.221(5)].
12. **Section G 8:** TMC, Inc. understands that obtaining an Opencut Mining Permit does not relieve TMC, Inc.’s obligation to comply with any other applicable federal, state, county, or local regulations, or ordinances and permits, licenses, and approvals for the operation. Obtaining an Opencut Mining Permit does not mean that an Operator can legally mine the site without first obtaining permits from other agencies. DEQ recommends contacting DEQ Water Protection Bureau, at 406-444-5546, to determine if a water discharge permit is required and DEQ Air Quality Bureau, at 406-444-3490, to determine if an air quality permit is required for this opencut operation.

Maps

Map(s) Note: If changes are made to the application that affects the map(s), submit a revised map(s). The map's date must be revised prior to resubmittal to reflect that the map has been changed. Map requirements can be found at ARM 17.24.221 (1-7) and in the Map Guideline at <http://deq.mt.gov/Mining/assistance>.

13. **General Map Deficiency:** The Proposed Permit Boundary and the Proposed Non-Bonded Boundary must be depicted on all maps as two different line types. Additionally, soil cannot be stockpiled in the non-bonded area. Either remove the soil stockpiles shown in the Site and Area Maps from the non-bonded area, or note on the Site and Area Maps that no Opencut Operations including stockpiling would occur in non-bonded areas until the areas are fully bonded.
14. **Site Map:** In accordance with ARM 17.24.221(3) all required map features are not shown on the site map or are inconsistent with the application documents. Site maps must be displayed on an aerial photo base. Submit a revised map that shows all required map features including, but not limited to the following:
 - a. Correct the Township, Section, and Range;
 - b. processing facilities, including approximate locations of:
 - i. crusher;
 - c. historic disturbances within or adjacent to permit area boundary; and
 - d. any other pertinent features that are necessary to ensure compliance with the Act and rules.
15. **Area Map:** In accordance with ARM 17.24.221(4), the area map must be displayed on an aerial photo base and must show and identify the following features within 1,000 feet outside of the permit boundary (including but not limited to):
 - a. Correct the Township, Section, and Range;
 - b. roads leading to the site;
 - c. above and below ground utilities and easements and their stated set back;
 - d. water wells. The Ground Water Information Center (GWIC) well locations (Figure 4.) do not match the well locations on the Area map (Figure 5.). Ensure that the locations of the wells are accurate and have been field verified; and



Figure 4.

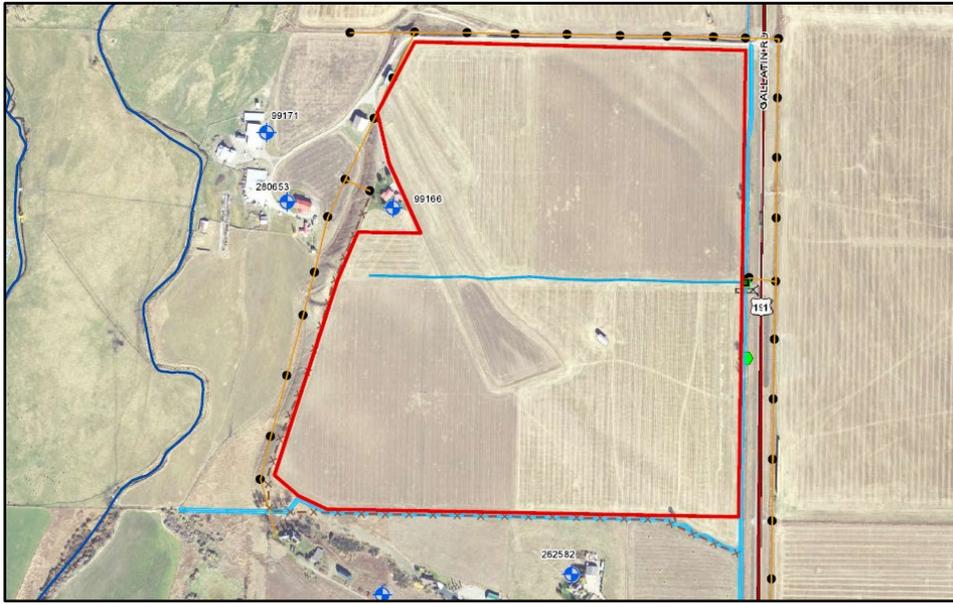


Figure 5.

- e. any other pertinent features that are necessary to ensure compliance with the Act and this subchapter.
- 16. Reclamation Map:** In accordance with ARM 17.24.221(5), reclamation maps must be displayed on an aerial photo base and must show and identify all the following existing and proposed features:
- a. Correct the Township, Section, and Range; and
 - b. any other pertinent features that are necessary to ensure compliance with the Act and this subchapter.
- 17. Location Map:** In accordance with ARM 17.24.221(6), the location map may be on an aerial or topo base and must show the site's location in relation to the nearest town, city, or major intersection and be sufficient to allow the public to locate the proposed site.
- a. Correct the Township, Section, and Range; and
 - b. any other pertinent features that are necessary to ensure compliance with the Act and this subchapter.

Supplemental Documents

- 18. Landowner Consultation Form:** The landowner name shown (i.e. A.H. Black **Company**) in section F at the bottom of the form is not consistent with the landowner name shown in section A1-5 of the *Standard Opencut Mining Permit Application*. Submit a revised form.
- 19. Determining Depth to Groundwater Worksheet:** The information provided to confirm groundwater levels is not adequate. Therefore, complete either a, b, or c of Section B-1 to ensure groundwater will not be intersected. Revise Section C1 in the Standard Opencut Application to ensure consistency with the worksheet answers and method(s).

Additionally, correct the Township, Section, and Range stated on the map.

- 20. Reclamation Bond Spreadsheet:** Ensure the following items are consistent with changes made in the application and that the latest spreadsheet form is downloaded before submitting the revisions [ARM 17.24.220].
- a. Soil and overburden depths; and
 - b. Any other pertinent items.

Bond Note: If the acreage, dollar amount, or other bond parameters change, submit a revised Bond or an additional Bond. The Opencut Section requires the original paper Bond to be submitted before the Permit can be issued.

The DEQ strongly recommends that you use the above-listed deficiencies as a checklist to confirm that your revised application materials are complete and acceptable prior to resubmittal.

Please call the number below if you have questions about these matters.

Sincerely,



Anne Spezia
Environmental Science Specialist
Opencut Mining Section
Department of Environmental Quality
P.O. Box 200901, Helena, MT 59620-0901
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Interested Parties